

# Fold them or flip them.

Bonding solutions for tomorrow's display designs

## 3M™ High Performance Clean Adhesive Transfer Tape 74/75/77/79000NH Series

Foldable OLED Displays can consist of many film layers – all bonded together. As devices are continuously folded and unfolded, stretched or bent, stress can be created between the layers, making maintaining good aesthetics a real challenge.

With low modulus at low temperature, 3M™ High Performance Clean Adhesive Transfer Tape 74/75/77/79000NH Series offers outstanding bonding performance and surface quality, providing you with a reliable bonding solution to help keep your displays in shape.



### Low modulus

to help reduce stress in the OLED panel layers and for reliability during folding



### Reliable peel adhesion

on various substrates (PET, SUS, PI, etc.)



### Maintains performance

even under harsh conditions  
(high humidity, temperature extremes)



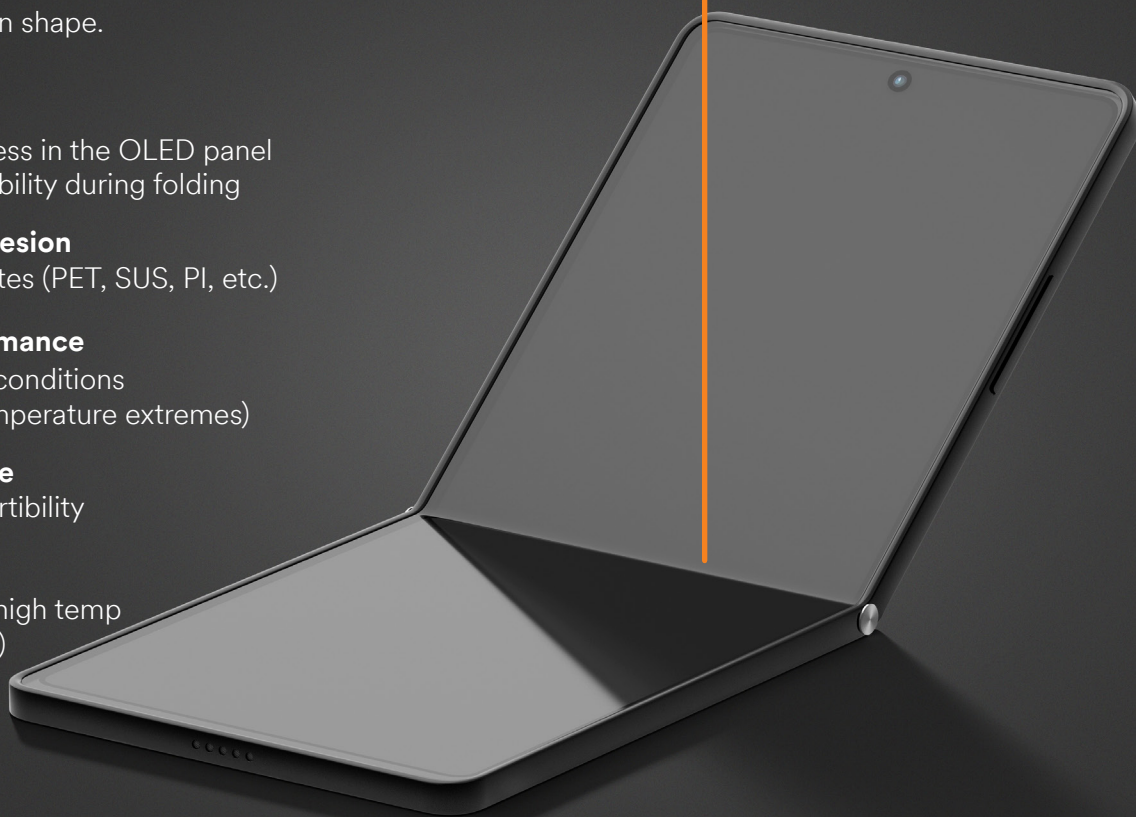
### Good liner release

for efficient convertibility



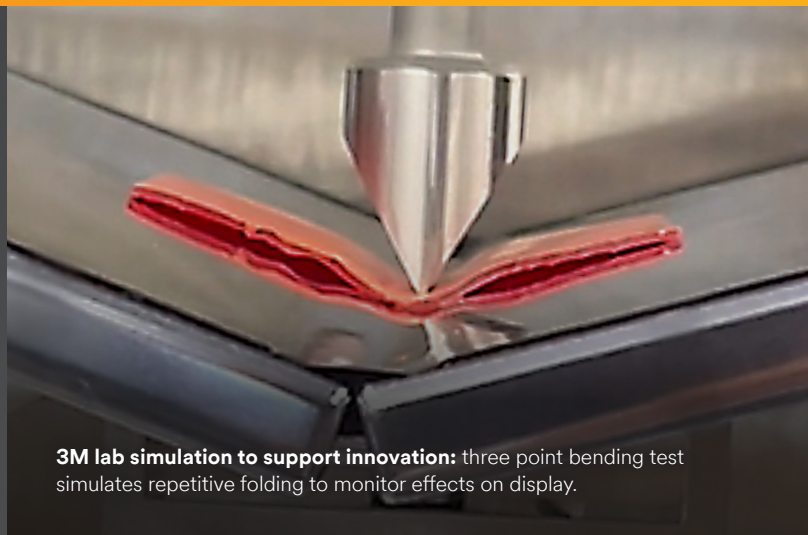
### Clean removal

on display side at high temp  
(75°C, 15 minutes)



# 3M™ High Performance Clean Adhesive Transfer Tape 74/75/77/79000NH Series

With a lower modulus formulation and reliable bonding performance under various temperature and humidity conditions, 3M™ Tape 74000NH Series helps you create your next generation foldable designs while reducing the risk of quality issues at the same time.

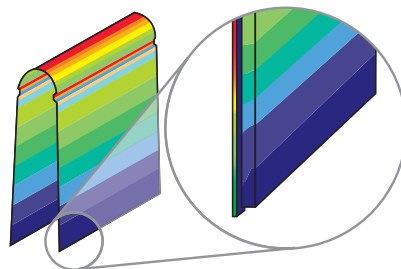


**3M lab simulation to support innovation:** three point bending test simulates repetitive folding to monitor effects on display.

**Figure 1 Bending strain**

Large shear deformation in adhesive causes compression and buckle in functional layers

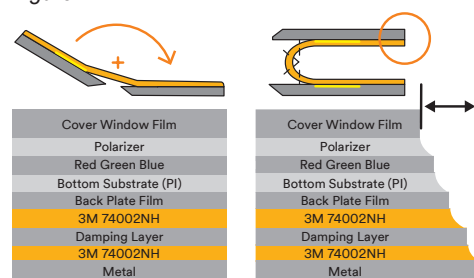
**Figure 1**



**Figure 2 OLED Display layers**

Layers creep and need to recover to stay aligned

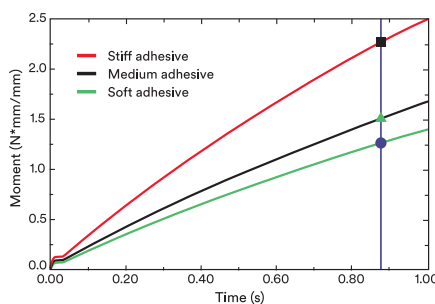
**Figure 2**



**Figure 3 Measuring Torque during folding**

Softer PSA (green) gives less torque

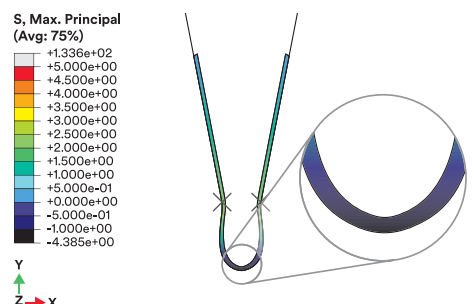
**Figure 3**



**Figure 4 Help reduce stress during folding**

PSA & teardrop design allow large shear between functional layers to reduce stress

**Figure 4**



Product	Format	Tape Thickness	Tape Color	Tg	Modulus at -20°C	Modulus at 25°C	Modulus at 85°C
3M™ High Performance Clean Adhesive Transfer Tape 74002NH	ATT	25 um	Clear	-35°C	0.3MPa	0.04MPa	0.03MPa
3M™ High Performance Clean Adhesive Transfer Tape 74207NH	ATT	75 um	Clear	-36°C	0.3MPa	0.05MPa	0.03MPa
3M™ High Performance Clean Adhesive Transfer Tape 75910NH	ATT	100 um	Clear	-25°C	0.6MPa	0.05MPa	0.03MPa
3M™ High Performance Clean Adhesive Transfer Tape 74911NH	ATT	110 um	Clear	-24°C	0.7MPa	0.07MPa	0.05MPa
3M™ High Performance Clean Adhesive Transfer Tape 77920NH	ATT	200 um	Clear	-35°C	0.4MPa	0.05MPa	0.04MPa
3M™ High Performance Clean Adhesive Transfer Tape 79920NH	ATT	200 um	Clear	-30°C	0.3MPa	0.04MPa	0.02MPa

Ask for Material Datacard: We measure rate and temperature dependent behavior over a wide range of conditions and help you model the material response using linear viscoelasticity in any direction (tensile, compression, shear).



Electronics Device Bonding  
3M Center, Building 225-3S-06  
St. Paul, MN 55144-1000

Phone 800-362-3550  
Web 3M.com/electronicbonding

**Warranty and Limited Remedy:** 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS, INCLUDING ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement or repair of the 3M product or refund of the purchase price.

**Limitation of Liability:** Except for the limited remedy above, and except to the extent prohibited by applicable law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential, regardless of the legal or equitable theory asserted.

3M is a trademarks of 3M Company. © 3M 2024. All rights reserved. Please recycle.